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| 10/566,621 | 04/10/2006 | Ziming Shen | 13836-00004-US | 7416 |
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| CONNOLLY BOVE LODGE & HUTZ, LLP | | | EXAMINER | |
| P O BOX 2207 | | | LE, RONG | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|------------------------------------|
| Office Action Summary | Application No. 10/566,621 | Applicant(s) SHEN ET AL. |
| | Examiner RONG LE | Art Unit 2423 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 10 April 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 22-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 22-39 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 30 January 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-166/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/30/2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 34-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Claim 34 is dependent upon claim 1 which is cancelled, for the rest of this detailed action claim 34 will be interpreted as being dependent upon claim 22.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22, 28, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US pub: 2004/0036622 A1) to (Dukach) in further view of (US pub: 2002/0162112 A1) to (Javed).

Regarding claims 22, 28, 34, Dukach teaches a real-time display on a mobile units display screen of recording images, which reads on (real-time information display module). The recording images are recorded by mobile units which includes

Art Unit: 2423

communication devices 382 which can wirelessly communicate, which reads on (transmit via wireless channel). (Par.188-189)

Dukach teaches an LCD display panel with an associated LCD board 1021 that drives the pixel of that display, and each such display also includes a video display board 1022 that receives input video signal, which reads on (LCD display module coupled to video source ...receiving video signal). (par.369, par.379) Dukach further teaches the displays 142 and 144 which could be LCD displays. (par.139)

Dukach teaches a central system programming 846 for synchronizing displays between multiple different display units, if the displays are close enough the display units will be synchronous, which reads on (synchronous transmitting module). (par.331) Dukach further teaches a few different ways the synchronous signal can be transmitted amongst two cabs with synchronous displays. (par.334)

Dukach fails to teach "video source input module for decoding contents... into video and audio signal".

Javed teaches a video processor 1120 capable of receiving a conventional NTSC signal from decoder 1110 and transmitting baseband TV signal to the television set 111, which reads on (video input module). (par. 74)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dukach by having a video source input module for decoding contents... into video and audio signal as taught by Javed in order to enable a TV viewer to browse the internet while watching television.

Regarding claim 24, 30, 36, Dukach in view of Javed teaches "synchronous transmitting module".

Javed further teaches "MCU control unit sending ... to IR emitting unit so that said IR emitting unit emits an infrared control signal outwards and ... transmits RF signal outwards".

Javed teaches an IR repeater which converts the IR output from the viewer device 1390 to a RF and broadcast it through the walls, and for certain devices converts the RF signal to IR commands to accommodate. (par. 86)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dukach in view of Javed by having MCU control unit sending ... to IR emitting unit so that said IR emitting unit emits an infrared control signal outwards and ... transmits RF signal outwards as taught by Javed in order to enable a TV viewer to browse the internet while watching television.

Claims 23, 29, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US pub: 2004/0036622 A1) to (Dukach) in further view of (US pub: 2002/0162112 A1) to (Javed),), in view of (US pat: 6,272,318 B1) to (Yoshioka), in view of (US pat: 7,061,477 B1) to (Noguchi), in further view of (US pub: 2002/0158779 A1) to (Ouyang).

Regarding claim 23, 29, 35, Dukach in view of Javed teaches "real-time information display module, LCD screen control board CPU unit, and control command unit".

Dukach in view of Javed fails to teach "RF receiving unit, signal channel filtering unit, ... wherein RF receiving unit receiving radio paging signal, demodulating a high frequency signal to binary level signal and transferring it to said signal filtering unit".

Yoshioka teaches receiving a broadcast radio wave, which reads on (radio paging signal), the demodulating section 13 which demodulates the intermediate frequency signal followed by a low pass filter 14, which reads on (signal channel filtering).(col. 5, ll. 24-35)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dukach in view of Javed by having a RF receiving unit, signal channel filtering unit, ... wherein RF receiving unit receiving radio paging signal, demodulating a high frequency signal to binary level signal and transferring it to said signal filtering unit as taught by Yoshioka in order to have a pager capable of setting a plurality of transmission speeds.

Dukach in view of Javed in view of Yoshioka fails to teach "deciding ... signal is a control signal or a display signal".

Noguchi teaches a controller 33 for outputting control signal and display data to have a picture displayed by the projector, which reads on (control signal...display signal). It is inherent that a decision is made within the controller which signal is what. (col. 2, ll. 21-41)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dukach in view of Javed in view of Yoshioka by

Art Unit: 2423

deciding ... signal is a control signal or a display signal as taught by Noguchi in order to lower the number of cables needed.

Dukach in view of Javed in view of Yoshioka in view of Noguchi fails to teach "if ... signal is a control signal ... control signal is used to control a on-off timer"

Shiozawa teaches the standby period timer starts the counting of the timer in accordance with the control signal given. (par. 7)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dukach in view of Javed in view of Yoshioka in view of Noguchi by having a control signal is used to control an on-off timer as taught by Shiozawa in order to set periods of standby time.

Dukach in view of Javed in view of Yoshioka in view of Noguchi in view of Shiozawa fails to teach "if the signal is a display signal, corresponding character dot array is extracted from said Chinese standard word library and transferred to said character display unit"

Ouyang teaches comparing pinyin symbol combination together with the string of pinyin symbols inputted beforehand with the dictionary to retrieve the corresponding Chinese character or word, which reads on (corresponding character dot array) and displaying it. (par.24)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dukach in view of Javed in view of Yoshioka in view of Noguchi in view of Shiozawa by having, corresponding character dot array extracted from said Chinese standard word library and transferred to said character

display unit as taught by Ouyang in order to enable the user to display Chinese language characters.

Claims 25, 31, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US pub: 2004/0036622 A1) to (Dukach) in view of (US pub: 2002/0162112 A1) to (Javed), in further view of (US pat: 6,181,364 B1) to (Ford).

Regarding claims 25, 31, 37, Dukach in view of Javed teaches “video source input module”

Dukach in view of Javed fails to teach “DVD player or flash memory card player”.

Ford teaches distribution of video from local sources, such as a DVD player. (col. 3, ll. 23-27)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dukach in view of Javed by having a video source, ... DVD player or flash memory card player as taught by Ford in order to allow multiple sources of video input.

Claims 26, 32, 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US pub: 2004/0036622 A1) to (Dukach) in view of (US pub: 2002/0162112 A1) to (Javed), in further view of (US pat: 6,181,364 B1) to (Ford), in further view of (US pat: 6,940,502 B2) to (Lin).

Regarding claims 26, 32, 38, Dukach in view of Javed teaches “LCD display module, ... main board, screen, displaying AV signal on screen”

Dukach in view of Javed fails to teach "receiving transferring processed AV signals from DVD player or flash memory card player".

Ford teaches distribution of video from local sources, such as a DVD player. (col. 3, ll. 23-27)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dukach in view of Javed by having a video source, ... DVD player or flash memory card player as taught by Ford in order to allow multiple sources of video input.

Dukach in view of Javed in view of Ford fails to teach "inverter inverts a DC voltage into a high voltage signal to drive a back light source of said LCD screen".

Lin teaches a DC/AC inverter 14b for transforming a DC voltage value for driving a discharge tube of backlight module in the LCD device 20. (col.3, ll. 38-50)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dukach in view of Javed in view of Ford by having an inverter inverts a DC voltage into a high voltage signal to drive a back light source of said LCD screen as taught by Lin in order to drive the backlight of the LCD during ripple interferences.

Claims 27, 33, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US pub: 2004/0036622 A1) to (Dukach) in view of (US pub: 2002/0162112 A1) to (Javed), in further view of (US pat: 6,125,259) to (Perlman).

Regarding claims 27, 33, 39, Dukach in view of Javed teaches "LCD control main board, ...video decoding unit, video processing unit, microprocessor,... inputted video signal and real-time information, video processing unit processing decoded video signal and real-time information to produce a processed signal transferred to LCD screen"

Dukach further teaches " audio processing unit, processing inputted audio signal and transferring processed audio signal to loudspeaker".

Dukach teaches controller 140, which reads on (audio processing unit) which outputs to speakers 376, shown in Fig 20.

Dukach in view of Javed fails to teach "IR control unit receiving an IR signal to trigger microprocessor to control lightness, contracts, and volume of the display".

Perlman teaches control signals from a remote to control the lightness, contracts, and volume of the display. (col.6, ll. 9-28)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dukach in view of Javed by having an IR control unit receiving an IR signal to trigger microprocessor to control lightness, contracts, and volume of the display as taught by Perlman in order to give the viewer more control over the display device remotely.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RONG LE whose telephone number is (571)270-7637. The examiner can normally be reached on M-F (8:30 - 6pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Y. Koenig can be reached on 571-272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RONG LE
Examiner
Art Unit 2423

/Andrew Y Koenig/
Supervisory Patent Examiner, Art Unit 2423